WHAT IS CLAIMED IS:

1. A battery-operated electric hand tool machine,comprising an electric motor (2) in a machine housing (3), an exchangeable battery pack (4),and a control module (5) with a power electronics (7) for motor control of the electric motor (2) and protection of the battery pack (4), wherein at least the power electronics (7) of the control module (5) is arranged entirely in the replaceable battery pack (4) and connected to the electric motor (2) via interface contacts (8).

2. The electric hand tool machine of claim 1, wherein the control module (5) comprises motor control means (6a) for controlling the electrical motor (2), and wherein the motor control means (6a) is connected via interface contacts (8) to control means (9) arranged on the outside of the machine housing (3).

3. The electric hand tool machine of claim 2, wherein the power electronics (7) of the control module (5) comprises at least the power electronics (7) of an inverter for a brushless electric motor (2).

4. The electric hand tool machine of claim 3, wherein the control module (5) comprises rotor control means (6b) connected to position sensors (10) on the brushless electric motor (2) via interface contacts (8) for controlling the inverter depending on the rotor position of the brushless electric motor (2).

5. The electric hand tool machine of claim 4, wherein the control module (5) comprises phase current sensors (11) for controlling the brushless electric motor (2) and wherein the brushless electric motor (2) is connected via interface contacts (8) to the phase coils (12) on the brushless electric motor (2).

6. The electric hand tool machine of claim 5, wherein the control module (5) includes the storage battery monitoring means (6c) of the battery back (4).

7. The electric hand tool machine of claim 6, wherein the control means (5) contains the charge controller (6d) of the battery pack (4).

8. The electric hand tool machine of claim 7, wherein the rechargeable current storage cells (13) are modularly configured inside of the exchangeable battery pack (4) and are electrically connected via removable connectors (15) to the control module (5).

9. A storage battery with interface contacts (8) for exchangeable connection to a machine housing (3) of an electric hand tool machine (1) having an electric motor (2), wherein a power electronics (7) is electrically connected with at least three interface contacts (8).

10. The battery pack of claim 1, wherein at least eight interface contacts (8) are present.